4.0 INFORMATION AND ANALYSIS
4.1 Measurement and Analysis of Organizational Performance
4.1a Performance Measurement

4.1a(1) The infrastructure for ADOT's performance measurement system starts with the Governor's Strategic Direction for State Government. From that, key goals are identified for each agency. ADOT then focuses on its internal strategic planning process, which includes the origination of its five Goals, the Strategic Plan, three Department Strategic Issues, and eleven Key Performance Measures. (See Figure 2-1.) ADOT's Strategic Plan and Key Measures foster employee developed subprograms and key measures at each operating level of the Department. The subprograms define how the Key Performance Measures will be met and ensure that each succeeding layer supports its predecessor.

ADOT senior management reviews Strategic Plan performance and submits a Key Performance Measures report to the Governor monthly. As ADOT's significant business trends change either by legislative action, modifications in funding sources, and/or stakeholder demands, revisions are made and communicated to all affected levels. Similarly, each operating level reviews its performance and reports upward to facilitate the senior management's analyses. At the sub-program level, critical measures are reviewed on a weekly or even a daily basis as necessary. Data is collected, analyzed, and reported by the Office of Strategic Planning and Budget.

4.1a(2) MVD customer performance comprises four of ADOT's Key Measurement Performances. The 1999 Winward Cooley Customer Satisfaction Survey identified that many Arizona stakeholders rated ADOT based on their experience at an MVD office. In response, MVD has implemented a wide variety of programs, including the nationally recognized ServiceArizona program, to meet customers' needs and earn their satisfaction. (See results in Figure 7-1.)

ServiceArizona is a partnership between the Motor Vehicle Division and a third party. ServiceArizona allows MVD customers to complete many of their transactions via MVD's ServiceArizona Website or telephone. The program is customer-driven and MVD measures its effectiveness via the number of customers that utilize ServiceArizona versus an MVD office. The third party tracks and reports monthly the number of Internet Transactions and the results of an electronic Customer Survey. The ServiceArizona measure was chosen as an indicator of key operational performance because it reaches so many customers and is one of ADOT's core business functions.

Of MVD's key objectives, five of them target customer satisfaction performance issues (See results in Figure 7-3):

- Average customer total visit time (door-to-door) in field offices (minutes);
- Percent of customers waiting for fifteen minutes or less;
- Percent of customers rating overall service either Excellent or Good;
- Percent of written constituent inquiries responded to within 10 business days;
- Percent of constituent inquiries received via the Internet responded to within 10 business days.

MVD data is collected via Q-Matic™, B-2 Cash Drawer, review of recorded phone calls, document logs and electronically scanned customer surveys. Both Q-Matic™ and B-2 Cash Drawer systems electronically record customer wait and transaction time in the MVD office. The MVD Customer Service Program reviews the data for each measurement daily, weekly and monthly as appropriate and prepares monthly reports that are available to its stakeholders. For the first two items, the local MVD Office Manager and his/her staff also review the data daily. Using the data collected, staff input, and benchmarking with other state customer service programs, MVD is constantly reviewing/refining processes and procedures to increase customer performance against targets.

MVD is implementing an additional best practice customer service strategy (Shortest Service Time), modeled after a program used by the Virginia MVD. Shortest Service Time identifies the "most common" customer service procedures that require the least amount of time to complete. Then the MVD local office staff will make an extra effort to complete these procedures first, which results in shorter wait times for the majority of its customers.

The largest percentage of ADOT's annual budget is invested in planning, building (via contractors) and maintaining the State's Transportation Infrastructure. The Department utilizes a rolling Five-Year Transportation Facilities Construction Program for highway project development. The Financial Management Services Section forecasts annually the Department's revenues and expenditures using two financial models: 1) statewide and 2) Maricopa Association of Governments. Both models meet financial industry standards, and the results are reviewed for validity by independent financial consultants.

The Office of Strategic Planning and Budget collects data monthly to analyze and track the awarding of construction dollars. This is a major part of the delivery of the State Highway Infrastructure and is a key performance measure

directly linked to ADOT's mission. (See result in Figure 7-22.)

Human Resources gathers data in five areas relative to employees, i.e., Department Turnover by Classification, Age of Workforce, Discipline Actions by Division, Reasons for Terminations, and EEOC Complaints. The data is cross-referenced and analyzed to identify the most frequent factors occurring when an employee leaves the Department. They also collect data on the number of days it takes to process a hiring list, which is an additional indicator of overall operational performance.

Several Performance Measurements link directly to the State's Transportation Infrastructure, and the Department's mission:

- Statewide travel lane miles open to traffic – the availability of the system to its stakeholders;
- Pavement condition – the life cycle of the system; and the
- Fatality Rate – the safety of the system.

The Department's Five-Year Transportation Construction Program establishes the performance measures for State Lane Miles Open. Projects are segregated as to "additional lane miles" and "new lane miles". Lane miles are tracked, depending on the project, as centerline-miles, travel-lane-miles, auxiliary-lane-miles and/or striped-lane-miles. Each project has a beginning, and an open-to-the-public end date. Once a project begins, the ADOT District, accountable for the project transmits monthly Project progress reports. The data is collected and maintained by the Office of Strategic Planning and Budget. Additionally, the ADOT Field Reports Section prepares and submits a monthly Status of Projects Under Construction Report with "Percent (%) Completed" information on all ADOT highway projects.

ADOT uses contractors to build the highway infrastructure, however, it retains the accountability for maintenance. Pavement condition data is collected relative to this effort. Every year ADOT Materials Group (Materials Pavement Management Organization) inspects every mile of the ADOT transportation system for cracking (visual inspection), roughness, and rutting (mechanical inspection). The International Roughness Index is the used as the inspection criteria, which is used by every state with some variances in emphasis such as climate issues, population, etc. ADOT ranks very high in this category. (See results Figure 7-5.)

ADOT has little control over how its stakeholders drive; however, it is accountable for ensuring that the State Transportation Infrastructure is safe for driving. Therefore, ADOT's Traffic Engineering Group (Traffic Records Section) tracks all reported accident and fatality rates for the system in the annual Motor Vehicle Crash Facts report. ADOT developed a strategy for reducing fatalities in Arizona, with the formation of the Highway Safety Team, a high-level partnering effort with external groups such as: Mothers Against Drunk Drivers, Students Against Drunk Drivers, Department of Public Safety, Federal Highway Administration, and local police and enforcement agencies. They meet monthly to develop strategies, create action steps, and check progress in their effort to reduce fatalities. (See results Figure 7-28.)

The Aeronautics Division is accountable for monitoring and supporting the safe and orderly development of the state-based aviation infrastructure. A primary measurement of the Division's performance in this regard is the registration of all Arizona-based aircraft, approximately 6,000 planes in 2001. The Division prepares monthly reports regarding registration performance for both the number of registrations and the revenue collected.

The Aeronautics Division also manages the Airport Grants and Loan Program totaling more than $15 million. They prepare a monthly report, which is included in the Financial Management Services Monthly Income Report. This report is available to all ADOT stakeholders.

Arizona Highways magazine's business goal is to achieve breakeven status each year. The magazine has adopted a publishing industry performance standard of annual subscription performance for its business strategy. The specific goal for FY2001 is to average 360,000 subscriptions. Subscription performance is tracked relative to: new subscribers, renewals, cancellations and newsstand sales, which is the least expensive way of securing new subscriptions. This data is used by the magazine marketing staff to help identify the best methods for marketing the magazine, to compete against the international competition for subscriber dollars. The magazine publisher reports budget and subscription performance variances-to-goal to the Core Team on a monthly basis.

Safety is very important to ADOT due to its high-risk exposure while working on highway construction and maintenance, facilities maintenance, equipment services shops, MVD enforcement, natural resources and in the Information Technologies Group. The Safety and Health Office staff measures all aspects of safety and reports monthly as an overall measure of organizational performance. Each month, every organization measures hours of exposure, number of injuries, lost time injuries, lost days, incident rate, frequency rate, severity rate, and type of injury. The data is compared against past performance in each category and is sent to all managers throughout the state. (See results in Figure 7-17.)

Constituent response is measured as an indicator of progress toward the overall Department objective to "respond to constituent inquiries directed to the Legislative Services Office within 10 working days, 95% of the time." (See results in Figure 7-27.)

4.1a(3) By statute, ADOT is solely accountable for Arizona's portion of the national Interstate Transportation System and the Arizona State Transportation Infrastructure. Nationally there are potentially fifty (i.e. dependant upon the assumptions regarding comparability of programs) Departments of Transportation to compare and benchmark performance against. These comparisons take place via the data the Department sends to the Federal Highway Administration, and while attending regional Department of Transportation conferences and seminars. There the participants share plans and benchmarks to maintain best practice standards for the development and maintenance of the transportation infrastructure. (See results Figure 7-6.)

ADOT representatives attend industry conferences and seminars sponsored by private sector partners where industry best practices and benchmarks are discussed. Additionally, ADOT's Research Unit reviews and summarizes industry articles and publications, which it distributes via monthly E-mails. Innovative programs such as ADOT's Design/Build and Use of Rubberized Pavement are two good examples of best practices that are shared between Departments of Transportation, industry, and private sector partners. The Intermodal Materials Group is nationally recognized for Rubberized Pavement development and the Department has recycled over 10 million tires to implement rubberized pavement technology. Rubberized surfaces are found to be more durable and provide a quieter ride.

4.1b(1) MVD uses ServiceArizona data to measure the effectiveness and efficiency of on-line transactions to serve customers. The program is internationally recognized as a benchmark for MVD best practices.

ADOT uses the forecasted results of Department revenues and expenditures to determine; (1) if and when it will need to issue bonds to meet project cash flow requirements and, (2) if bonding against future federal revenues will support the acceleration of planned highway projects, an ADOT strategic issue. If the data supports bonding, a project prospectus and request for permission to bond is presented to the State Transportation Board for their approval.

Once the bond is marketed, the Financial Management Services Section prepares monthly Variance Analysis Report for the Transportation Board, Core Team, financial stakeholders, financial consultants and the ADOT Priority Planning Advisory Committee. The Variance Analysis Report tracks both Maricopa Association of Governments (i.e. project specific), and State (i.e. aggregate statewide projects). The State Transportation Board must approve any variance-driven changes to the program defined in the bond's prospectus.

The Variance Analysis Report also allows the Department to test its financial models for the Highway User Revenue Fund (HURF) and Regional Area Revenue Fund (RARF) projections. ADOT is testing a best practice process in this area. The Department's independent financial consultants are managing the Highway User Revenue Fund and Regional Areas Revenue Fund models, and Financial Management Services is validating their data. Together, the two methods of modeling act as a check and balance against each other.

After collecting data on the employee turnover rate, Human Resources developed a "litmus test" to assist management in identifying potential turnover situations. ADOT is committed to its personnel, as seen in its third goal, "To develop and retain a high performing, successful workforce." (See results in Figure 7-9.)

Using the Law Enforcement Accident Reports, the ADOT Traffic Records Section, in concert with ADOT Risk Management and ADOT Safety, analyzes the data to determine if the transportation system might have contributed to the accident. The results of this analysis are transmitted to the Construction and Highway Maintenance Group for consideration and the appropriate action.

Variances in the percent of construction dollars awarded versus planned are identified and, if negative, are resolved at the District level. Semiannually, the Office of Strategic Planning and Budget analyzes and cross-references this data to the Five-Year Plan, to determine and evaluate any variances. In many cases, this cross-referencing activity is the impetus for an ADOT breakthrough strategy regarding measurements and resources.

Materials Pavement Management prepares an annual report prioritizing the "repair, action, required" sections of the system. The Materials Pavement Management team meets with District Maintenance Engineers accountable for the identified sections, and together they develop a repair plan and budget. Materials Pavement Management also identifies the cause(s) for pavement failure. These causes are logged and the data used to develop expanded and improved highway maintenance procedures, better construction materials and/or design/construction processes.

The Core Team and the Financial Management Services Section review the Financial Management Services' Monthly Income Reports. The applicable aviation data is sent to the Federal Aviation Administration. The Aeronautics Division tracks non-registrants to determine their reason for failure to comply. This data is used to develop programs that reduce the number of "truants" each year. The registrations and accompanying fees help fund the Division's programs statewide.

Research was conducted with highway customers (in focus groups, phone and written surveys) over a three-year period, to determine what Level of Service is acceptable regarding highway maintenance. This helped to establish a target for highway maintenance, knowing the maintenance budget could not meet every customer requirement. Examples of maintenance reductions are the frequency of litter pick up and graffiti removal on the freeways. The research has, also, led to an increase in the frequency of dead plant removal and replacement.

4.1b(2) Problem-Cause Data Reports on Materials Pavement Management are shared with other state Departments of Transportation and ADOT contractors as a proactive approach to future system projects.

Financial reports regarding ADOT's bonds are published in national financial publications and are posted on ADOT's Internet Website. ADOT's objective is to earn an "AAA" rating for its bonds.

The Office of Strategic Planning and Budget combines the lane mile measures and prepares a monthly analysis and various graphic reports, which are transmitted to the Governor's Office, ADOT Core Team, ADOT Operations Team, various assigned District staff and stakeholders. The reports are also published on ADOT's Internet Website.

The Crash Facts Report is sent to the Governor's Office and the State Transportation Board. The information is also transmitted to the Federal Highway Administration for inclusion in their annual report. The Highway Safety Team's Action Plan Matrix is sent to the Governor's Office, the Federal Highway Administration, and to all the organizations that participate on the team.

Results of the mechanical inspection of pavement condition are forwarded to the Federal Highway Administration for inclusion in their annual National Highway System Length International Roughness Index report, which is available on the Federal Highway Administration Internet Website. This report allows ADOT to compare itself against the performance of "comparable" states, and to share best practice information.

4.1b(3) All of the various databases reported are a constant catalyst and guide for the development of ADOT's Strategic Plan, budget requests and the subprograms required to terminate, revise, expand and/or create ADOT's operating procedures and processes. For example, MVD's on-going Customer Satisfaction Programs continue to drive proactive changes in the MVD Offices' procedures and redefine the scope of its nationally recognized ServiceArizona Program.

4.2 Information Management

4.2a Data Availability

4.2a(1) ADOT's information infrastructure encompasses major systems, such as: Local Area Networks, Wide Area Networks, Electronic Data Interchange, Intranet, and Internet to deliver and achieve this critical performance measurement and the analysis function. Currently, approximately 4,800 (98.6%) of ADOT's employees have E-mail and Intranet capabilities and approximately 1,200 (25.3%) have Internet access. Additionally, ADOT's mission and vision statements, and performance measures are posted on ADOT's Internet Website for internal and external stakeholder review. ADOT's performance against Federal Highway Administration standards is reported on their Internet Website, facilitating benchmarking with comparable State Departments of Transportation nationwide.

ADOT allocates significant resources to ensure that the necessary databases and data portals are implemented, available, accessible, user-friendly and utilized in all of its daily operations.

4.2a(2) As a State agency, ADOT has a fiduciary responsibility to ensure that ADOT data is controlled and monitored for integrity, reliability, accuracy, timeliness, security and confidentially. This is especially true relative to the Motor Vehicle Records. Therefore, ADOT's Audit and Analysis Section regularly samples and verifies data pertaining to all key measurement areas. The audit team ensures that data meets the required reporting period by tracking electronic date stamping of random samples. Additionally, ADOT's Information Technology Group, Security Section enforces ADOT's policies and procedures regarding the security, confidentiality and use of agency data and information. Computer security training is provided to new users, and all employees are required to sign security agreements before being given access to the computer system. Violations of the agreement are grounds for termination.

4.2a(3) ADOT's employees, customers, partners and stakeholders, nationwide, expect real time, accessible data regarding the State's Transportation Infrastructure. To this

end, the agency utilizes E-mail, newsletters, Intranet and Internet sites, newspapers, public forums, and postings in ADOT and other government offices. In outlying areas of the state where interested parties do not have easy access to ADOT information sources, ADOT section heads are accountable for distributing the information (i.e., primarily through staff meetings). ADOT has established real time data-in/data-out schedules for the communication of specific reports to facilitate end user analysis and the implementation of appropriate actions. This system has proven effective for keeping internal and external stakeholders current with ADOT business needs, directions, and actions.

4.2b Hardware and Software Quality

4.2b(1) ADOT has been successful in acquiring funding through legislative appropriations for the "Refresh Program," in order to update and replace computers (i.e. desktops and laptops) and servers. Of approximately 5,000 devices in the Department, twenty-five percent are replaced every four-years with state-of-the-art equipment to take advantage of the latest technologies. The Information Technology Group is accountable for ADOT's hardware and software reliability, appropriateness to task, and user-friendliness. As new application software is purchased or written in-house, an extensive software Quality Assurance Program is utilized to determine the software's compliance with Department standards. The Quality Assurance team executes rigorous testing scripts to determine any deficiencies in software products.

The Information Technology Group makes system-wide updates from a central location when changes are necessary. They use E-mail to communicate virus warnings and corrections to keep ADOT's computer system virus-free.

4.2b(2) ADOT's Chief Information Officer is aware of all Strategic Plan modifications and meets regularly with ADOT Assistant Directors and their direct reports to understand and anticipate future business plan needs and directions. These proactive relationships expedite the Information Technology Groups' response time, either software and/or hardware, to address revised operating technology challenges.